

We Claim:

1. A textile article having flame resistant properties comprising
5 a plurality of inherently flame resistant fibers formed into a fabric, and
a finish on the fabric,
wherein the finish imparts a property selected from the group consisting of: an
antimicrobial agent, a soil repellent and a fluid repellent.
- 10 2. The textile article according to claim 1 wherein the finished textile
article has a flame resistance that passes the standard method NFPA 701 – 1996
edition testing protocol.
3. The textile article according to claim 1 wherein the article is made of
15 polyester fibers.
4. The textile article according to claim 3 wherein the article is made of
AVORA™ fibers.
- 20 5. The textile article according to claim 1 wherein the antimicrobial agent
is a molecularly bound antimicrobial agent.
6. The textile article according to claim 5 wherein the antimicrobial agent
is an organosilane.
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7. The textile article according to claim 6 wherein the antimicrobial agent
is AEM 5700™.
8. The textile article according to claim 1 wherein the fluid repellent is a
30 fluorochemical.

9. The textile article according to claim 8 wherein the fluid repellent is also a soil repellent.

10. The textile article according to claim 9 wherein the fluid is ZONYL
5 7040™.

11. The textile article according to claim 1 wherein the textile article is a bedspread.

10 12. The textile article according to claim 1 wherein the textile article is a drapery.

13. The textile article according to claim 1 wherein the textile article is upholstery fabric.

15 14. The textile article according to claim 1 wherein the finish includes a flame retardant.

15 15. The textile article according to claim 14 wherein the flame retardant is
20 a phosphonate.

16. The textile article according to claim 15 wherein the flame retardant is a cyclic phosphonate.

25 17. The textile article according to claim 16 wherein the finish includes Flame Retardant 50.

18. The textile article according to claim 1 wherein the article is made from Trevira CS fibers.

30 19. A textile article having flame resistant properties comprising

a plurality of inherently flame resistant polyester fibers formed into a fabric,
and
a finish on the fabric including a cyclic phosphonate flame retardant,
wherein the finish includes a molecularly bound antimicrobial agent which is
5 an organosilane, and a fluorochemical soil and fluid repellent, and
wherein the finished fabric has a flame resistance that passes the standard
method NFPA 701 – 1996 edition testing protocol.

20. A textile article having flame resistant properties comprising
10 a plurality of inherently flame resistant fibers formed into a fabric, and
a finish on the fabric containing a fluorochemical, a cyclic phosphonate and an
organosilane.

21. The textile article according to claim 20 wherein the finished textile
15 article has a flame resistance that passes the standard method NFPA 701 – 1996
edition testing protocol.

22. A method of finishing an inherently flame resistant fabric comprising:
forming a fabric of inherently flame resistant fibers,
20 saturating the fabric with a composition containing a fluorochemical
and one or more of an antimicrobial agent, a flame retardant, a fluid repellent agent
and a soil repellent agent,
drying the fabric.

23. A method as claimed in claim 22 further comprising testing the fabric
25 and determining that the fabric passes the standard method NFPA 701 – 1996 edition
testing protocol.

24. A method as claimed in claim 22 wherein saturating is accomplished
30 by padding.

25. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant is a phosphonate.

26. A method as claimed in claim 22 wherein saturating the fabric includes
5 saturating with a composition in which the flame retardant is a cyclic phosphonate.

27. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant is Flame Retardant 50.

10 28. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant comprises between about 2 % and 10 % by weight of the composition.

29. A method as claimed in claim 22 wherein saturating the fabric includes
15 saturating with a composition in which the flame retardant comprises about 4.8 % by weight of the composition.

30. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent is a molecularly bound
20 antimicrobial agent.

31. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent is an organosilane.

25 32. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent is AEM 5700™.

33. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent comprises between
30 about 0.2 % and 2.0 % by weight of the composition.

34. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent comprises about 0.48 % by weight of the composition.

5 35. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellant is also a soil repellant.

36. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellant is a fluorochemical.

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37. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellant is ZONYL 7040™.

38. A method as claimed in claim 22 wherein saturating the fabric includes
15 saturating with a composition in which the fluid repellant comprises between about 2 % and 10 % by weight of the composition.

39. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellant comprises about
20 3.6 % by weight of the composition.

40. A method as claimed in claim 22 wherein forming includes fabric formation from Trevira CS fibers.

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41. A method as claimed in claim 22 wherein forming includes fabric formation from AVORA™ fibers.

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